

### UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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| APPLICATION NO 04 1 FILING DATE 1 97 |  | LEVERSTNAMED INVENTOR |   | M                     | ATTORNEY BOCKETING? |  |
|--------------------------------------|--|-----------------------|---|-----------------------|---------------------|--|
|                                      | ANTHONY J JANIUK<br>WATERS CORPORATION | IM11/1202             |   | TUCK <b>EXAMIÑ</b> ER |                     |  |
|                                      |  |                       | コ | 1000                  | EXAMINEN            |  |
|                                      | 34 MAPLE STREET<br>MILFORD MA 01757    |                       |   | ART ÚNÍTŽ 1           | PAPER NUMBER        |  |
|                                      |  |                       |   | •                     | 5<br>12/02/98       |  |
|                                      |  |                       |   | DATE MAILED:          |                     |  |

Please find below and/or attached an Office communication concerning this application or pr ceeding.

**Commissioner of Patents and Trademarks** 

|  | T  | T                                      |   |             |
|--|--|--|---|-------------|
|  | Application No. Applicant(s)  834061 LEVEILLE  Examiner Group Art Unit |  |   |             |
| Office Action Summary  | Examiner 0   | <u>~</u> L v                           | Group Art Unit                                  |             |
|  | P. 100   | KER                                    | 1721  |             |
| The MAILING DATE of this communication appears   |  |  | orrespondence add                               | lress       |
|  |  |  |   |             |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION.   | EXPIRE 3   | MONTH(S                                | ) FROM THE MAILII                               | NG DATE     |
| <ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.1 from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a repl</li> <li>If NO period for reply is specified above, such period shall, by default, e</li> <li>Failure to reply within the set or extended period for reply will, by statute</li> </ul> | y within the statutory minim<br>kpire SIX (6) MONTHS fron              | um of thirty (30)<br>n the mailing dat | days will be considered e of this communication | timely.     |
| Status   |  |  |   |             |
| Responsive to communication(s) filed on  | /1/98  |  |   | •           |
| This action is FINAL.  | /  |  |   |             |
| <ul> <li>Since this application is in condition for allowance except for<br/>accordance with the practice under Ex parte Quayle, 1935</li> </ul>   | or formal matters, <b>pros</b> e<br>C.D. 1 1; 453 O.G. 213             | ecution as to<br>3.                    | the merits is close                             | ed in       |
| Disposition of Claims  |  |  |   |             |
| Of the above claim(s)  Claim(s) $17-20$ and $38-39$ Claim(s) $17-20$ and $38-39$ Claim(s) $2-15$ and $34-37$   | -39  | is/are pending in the application.     |   | ation.      |
| Of the above claim(s)  | is/are   | is/are withdrawn from consideration.   |   |             |
| $\nearrow$ Claim(s) $17 - 20$ and $38 - 39$  | is/are   | is/are allowed.                        |   |             |
| X Claim(s) 2 - 15 and 34 -37   | is/are   | is/are rejected.                       |   |             |
| ☐ Claim(s)   | is/are   | is/are objected to.                    |   |             |
| □ Claim(s)   |  |  |   |             |
| Application Papers   |  | require                                | ement.  |             |
| ☐ See the attached Notice of Draftsperson's Patent Drawing   | Review, PTO-948.   |  |   |             |
| ☐ The proposed drawing correction, filed on  | is approved  | $\square$ disapprove                   | d.  |             |
| ☐ The drawing(s) filed on is/are objecte   | d to by the Examiner.  |  |   |             |
| ☐ The specification is objected to by the Examiner.  |  |  |   |             |
| ☐ The oath or declaration is objected to by the Examiner.  |  |  |   |             |
| Pri rity under 35 U.S.C. § 119 (a)-(d)   |  |  |   |             |
| ☐ Acknowledgment is made of a claim for foreign priority und   |  |  |   |             |
| <ul> <li>☐ All ☐ Some* ☐ None of the CERTIFIED copies of th</li> <li>☐ received.</li> </ul>  |  |  |   |             |
| -  | )  |  |   |             |
| <ul><li>☐ received.</li><li>☐ received in Application No. (Series Code/Serial Number</li></ul>   | )national Bureau (PCT F  | Rule 1 7.2(a)).                        |   |             |
| <ul> <li>□ received.</li> <li>□ received in Application No. (Series Code/Serial Number</li> <li>□ received in this national stage application from the International</li> </ul>  | )national Bureau (PCT F  | Rule 1 7.2(a)).                        |   |             |
| <ul> <li>□ received.</li> <li>□ received in Application No. (Series Code/Serial Number</li> <li>□ received in this national stage application from the Interest</li> <li>*Certified copies not received:</li> </ul>  | )national Bureau (PCT F  | Rule 1 7.2(a)).                        |   |             |
| □ received. □ received in Application No. (Series Code/Serial Number □ received in this national stage application from the Inter  *Certified copies not received:  Attachm nt(s)  | )national Bureau (PCT F  | Rule 1 7.2(a)).<br>nterview Sumi       | ·   | on, PTO-152 |

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 34-36 are dependent upon canceled claim 33...

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 2-15 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Orignac et al., Applied Physics Lett., vol. 69, no. 7, pages 895-897.

Orignac teaches a waveguide which comprises an Nd or Er doped sol-gel medium, wherein Erbium nitrate is used as the Er salt. Such waveguide has light input means and means for measuring the spectral output of light. Applicants intended use as a calibration medium does not distinguish.

5. Claims 2-4, 6, 7, 9-15 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Xu et al., Journal of Non-Crystalline Solids, vol. 194, pages 235-240, (1996).

Xu teaches an optical device comprising a laser, spectrophotometer and photomultiplier which utilizes a doped sol-gel medium comprising Erbium nitrate. Such device has light input means and means for measuring the spectral output of light. Applicants intended use as a calibration medium does not distinguish.

# Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10, 12 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over 7. Orignac and Xu.

Orignac and Xu are described in the previous paragraphs. Orignac and Xu differ from the present invention in that the doping by impregnating is not disclosed. It is well known in the art of sol-gel chemistry to add dopes to the gel by direct mixed doping or impregnation. It would be thus obvious to one of ordinary skill in the art to utilize impregnation instead of mixed doping in the inventions of Orignac and Xu.

- Claims 17-20, 38 and 39 are allowable over the art of record. 8.
- It is believed that in claims 34-36 applicant intended to delete 33 and insert therefor 39. 9 Upon such amendment, claims 34-36 would also be rendered allowable. Claims 2-15 and 37 are drawn to the calibration medium, thus applicants intended use in an optical instrument in the preamble, and use with a sensor do not distinguish the invention from the prior art, since it is the calibration medium which is being claimed. Where applicant has claimed the method or actual instrumentation such as in claims 38 and 39, such claims are deemed distinguished from the prior art. Applicant has argued that the method of making including impregnating should distinguish over the prior art. Only claim 12 of the now rejected claims is limited to such specific

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impregnating. It is noted that this is just a product by process claim, and thus the product and not the process is examined. Applicant has not shown that different products are obtained by the impregnation doping and the other doping methods disclosed in the prior art. Furthermore, doping by direct mixing or impregnation are well known methods of alternatively doping, and would be obvious variations to one of ordinary skill. The rejections of the medium are thus maintained

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office 10. action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Sharon Gibson may be contacted at 703-308-4552. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-305-5408. The after final fax no. Is 703-305-3599.

PCT-1724 December 1, 1998

PHILIP C. TUCKER ART UNIT 1721